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| APPLICATION NO. | FILING DAT | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|--------------------------------|----------------------|-------------------------|------------------|
| 09/855,003 | 05/14/2001 | Chii-How Chang | 39088/234528 | 1199 |
| 22887 | 7590 07/1 | 03 | | |
| | SION ASSOCIAT | EXAMINER | | |
| 2355 MAIN | TUAL PROPERTY STREET, SUITE | CHU, KIM KWOK | | |
| IRVINE, C | A 92614 | | ART UNIT | PAPER NUMBER |
| | | | 2653 | X |
| | | | DATE MAILED: 07/16/2003 | \mathcal{O} |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | Application No. | Applicant(s) | | | |
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| • | | 09/855,003 | CHANG, CHII-HOW | 2 | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| , | | Kim-Kwok CHU | 2653 | | | |
| | The MAILING DATE of this communication ap | | | | | |
| Period fo | • | | · | | | |
| THE if the after a | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, ma ly within the statutory minimum of will apply and will expire SIX (6) I e, cause the application to becom | y a reply be timely filed f thirty (30) days will be considered timely. MONTHS from the mailing date of this comme e ABANDONED (35 U.S.C. § 133). | nunication. | | |
| 1)🛛 | Responsive to communication(s) filed on Am | endment filed on 5/8/03 | <u> 3 (paper 7)</u> . | | | |
| 2a)⊠ | This action is FINAL . 2b) The | nis action is non-final. | | | | |
| 3) <u> </u> | Since this application is in condition for allow closed in accordance with the practice under on of Claims | | | nerits is | | |
| · | Claim(s) 1-18 is/are pending in the application | n | | | | |
| , | 4a) Of the above claim(s) is/are withdra | | | | | |
| | Claim(s) 19,20 and 23 is/are allowed. | | | | | |
| 6)⊠ | | | | | | |
| - '= | Claim(s) 6 is/are objected to. | • | | | | |
| 8) | Claim(s) are subject to restriction and/o | or election requirement. | | | | |
| Applicati | on Papers | , | | | | |
| 9)□ | The specification is objected to by the Examine | er. | | • | | |
| 10)[| The drawing(s) filed on is/are: a)□ acce | pted or b) objected to b | by the Examiner. | | | |
| | Applicant may not request that any objection to the | ne drawing(s) be held in at | peyance. See 37 CFR 1.85(a). | | | |
| 11)[| The proposed drawing correction filed on | _ is: a)☐ approved b)☐ | disapproved by the Examiner. | | | |
| | If approved, corrected drawings are required in re | • • | | | | |
| 12)[| The oath or declaration is objected to by the Ex | kaminer. | | | | |
| Priority ι | ınder 35 U.S.C. §§ 119 and 120 | | | | | |
| 13)⊠ | Acknowledgment is made of a claim for foreig | n priority under 35 U.S. | C. § 119(a)-(d) or (f). | | | |
| a) | ☑ All b)☐ Some * c)☐ None of: | | | | | |
| | 1. Certified copies of the priority documen | ts have been received. | | | | |
| | 2. Certified copies of the priority documen | ts have been received in | n Application No | | | |
| * 5 | 3. Copies of the certified copies of the pric application from the International Bu See the attached detailed Office action for a list | reau (PCT Rule 17.2(a |)). | age | | |
| 14) 🗌 A | acknowledgment is made of a claim for domest | ic priority under 35 U.S. | .C. § 119(e) (to a provisional ap | plication). | | |
| |) The translation of the foreign language proaction. The translation of the foreign language process. | • • | | | | |
| Attachmen | t(s) | | | | | |
| 2) 🔲 Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _ | 5) Notice | ew Summary (PTO-413) Paper No(s). of Informal Patent Application (PTO-1 | | | |

Response to Remarks

- 1. Applicant's Amendment (paper 7) filed on May 8, 2003 have been fully considered but they are not persuasive.
- (a) Applicant states that Wakabayashi's permanent magnet 3a and 3b is attached to the movable element 2. And on the contrary, Applicant has the permanent magnets attached to the fixed element (Page 7 of the Remarks, lines 15-22). Accordingly, in claim 1, Applicant does not claim above feature. In fact, in claim 1, Applicant does not claim any permanent magnet and its location.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United State..

3. Claims 1-5 and 7-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Wakabayashi (U.S. Patent 5,905,255).

Wakabayashi teaches a magnetic position device having all the elements and means as recited in claims 1-5 and 7-18. For example, Wakabayashi teaches the following: 09/855,003 page 3 AU 2653

(a) as in claim 1, a movable element 2 having a first yoke assembly 20 (Fig. 13);

- (b) as in claim 1, a fixed element 36 adjacent to the movable element 2 for generating a magnetic field to control the movable element 2 to be moved toward a position (Fig. 13; directions T, F or R is the predetermined position);
- (c) as in claim 2, the fixed element 36 comprises a second yoke assembly 32a and 32b; a magnet assembly 31a and 31b connected to the second yoke assembly 32a and 32b for generating the magnetic field (Fig. 18; column 19, lines 4-20);
- (d) as in claim 2, a first coil 6a for generating a first motive force in a first direction in response to the magnetic flux of the magnetic field (Fig. 13; the first coil 6a is a tracking coil, column 15; lines 22-34);
- (e) as in claim 2, a second coil 7a for generating a second motive force in a second direction in response to the magnetic flux of the magnetic field (Fig. 13; the second coil is the focusing coil; column 14, lines 63-67);
- (f) as in claim 3, the second coil 7a is perpendicular to
 the first coil 6a (Fig. 13);
- (g) as in claim 4, the second direction is perpendicular to the first direction (Fig. 14);
- (h) as in claim 5, the first coil 6a and the second coil 7a are winded around the second yoke assembly 32a (Fig. 13);

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(i) as in claim 7, the movable element 2 is capable of being moved along the first direction by the first motive force acted on the first yoke assembly (Fig. 13, tracking direction T is the first direction);

- (j) as in claim 8, the movable element 2 is capable of being moved along the second direction by the second motive force acted on the first yoke assembly (Fig. 13, focusing direction F is the second direction);
- (k) as in claim 9, the first coil 6a is a tracking coil
 (Fig. 13);
- (1) as in claim 10, the second coil 7a is a focusing coil
 (Fig. 13);
- (m) as in claim 11, the first yoke assembly 20 comprises two yokes 5a and 5c being mounted on two opposite sides of the movable element 2 respectively (Fig. 1; column 6, lines 5-10);
- (n) as in claim 12, the driver is a read/write head of an optical read device (Fig. 13); and
- (o) as in claim 13, the movable element 2 comprises an optical lens 1 (Fig. 13).
- 4. Claims 14-16 have limitations similar to those treated in the above rejection, and are met by the references as discussed above.

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5. Claims 17 and 18 have limitations similar to those treated in the above rejection, and are met by the references as discussed above.

6. Claims 21, 22 and 24 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mitsumori et al. (U.S. Patent 5,535,059).

Mitsumori teaches an objective lens driver having all the elements and means as recited in claims 21 and 22. For example, Mitsumori teaches the following:

- (a) as in claim 21, a movable element 12 having an objective lens (Fig. 3; movable element is the lens holder;
- (b) as in claim 21, the movable element does not attach to a permanent magnet, a tracking coil, and a focusing coil (Fig. 3; coil bobbin 13 is not attached to the lens holder 12);
- (c) as in claim 22, a fixed element 13 and 15 comprising the permanent magnet 23, the tracking coil 13b, and the focusing coil 13a so as to generate a magnetic flux which moves the movable element 12 (Fig. 3).
- 7. Method claim 24 is drawn to the method of using the corresponding apparatus claimed in claims 21 and 22. Therefore method claim 24 corresponds to apparatus claims 21 and 22 and are rejected for the same reasons of anticipation as used above.

Allowable Subject Matter

- 8. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Claims 19, 20 and 23 are allowable over prior art.
- 10. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 6, the prior art of record fails to teach or fairly suggest the magnet assembly which comprises a plurality of permanent magnets.

As in claim 19, the prior art of record fails to teach or fairly suggest that the fix element having a magnetic assembly which comprises one or more permanent magnets connected to the second yoke assembly configured to generate the magnetic field.

As in claim 20, the prior art of record fails to teach or fairly suggest the following:

- (a) a movable element comprising one or more first yokes;
- (b) a fix element having a magnetic assembly which comprises:
- (c) one or more second yokes;
- (d) one or more permanent magnets;

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- (e) focus coils for driving said movable element in a focus direction; and
- (f) tracking coils for driving said movable element in a tracking direction.

As in claim 23, the prior art of record fails to teach or fairly suggest the following:

- (a) a movable element 22 having an objective lens and a yoke;
- (b) a fixed element adjacent to the movable element to form a gap; and
- (c) the fixed element comprising a permanent magnet, a tracking coil, and a focusing coil for generating a magnetic flux across said gap which moves said movable element.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

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Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kasahara et al. (5,206,762) is pertinent because Kasahara teaches a lens holder with a tracking coil attached.

Tanaka (5,455,811) is pertinent because Tanaka teaches an optical lens driving device having a lens holder with driving coils attached.

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action

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13. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231 Or faxed to:

(703) 872-9314 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

GC 7/11/03

Kim-Kwok CHU Examiner AU2653 July 11, 2003

(703) 305-3032

WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
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